

Remarks/Arguments:

I. Status of the Claims

Claims 1, 10 and 13 are amended herein. Support for the amendments to claims 1 and 13 is found throughout the specification as originally filed, including Paragraph [00012]. Claim 10 has been amended to correct certain inadvertent typographical errors in the Markusch group of solvents. No new matter has been introduced. Claims 3-5 have been cancelled. Claims 15-21 have been withdrawn from consideration in view of a restriction requirement. As a result, claims 1, 2 and 6-14 remain pending and under examination in the above-identified application.

II. Claim Rejections under 35 U.S.C. §102

Applicants traverse the rejection of claims 1-4, 6-10 and 12-14 under 35 U.S.C. §102(b) as being anticipated by Senecal et al. (U.S. Pat. Application Publication No. 2001/0045547; hereinafter "the Senecal reference"). Reconsideration and withdrawal of the rejection are respectfully requested in view of the claim amendments submitted herewith.

As reflected in amended independent claim 1, one embodiment of Applicants' invention is directed to a process to make a dyed fiber which comprises mixing at least one dye capable of reversibly changing color and at least one polymer into at least one solvent at a temperature below the temperature at which the dye or polymer degrades to form a polymer dye solution and electrospinning said polymer dye solution to form a fiber wherein the dye penetrates more than the surface of the fiber, wherein the dye comprises a photochromic compound.

The Senecal reference, in Paragraph [0022], describes the incorporation of chemical indicator (pH) dyes into a DMF solution of polyurethane, with fibers being electrostatically spun from this solution onto a target substrate. The reference further characterizes these dyes as "colorimetric dyes" and teaches that indicator dye membranes prepared from the spun fibers "demonstrate reversible color changes consistent with chemical environment exposures [emphasis added]." Phenol red, thymol blue and phenolphthalein are mentioned as non-limiting examples of such colorimetric dyes. Thus, the reference proposes the use of dyes which are capable of reversibly changing color in response to changes in the chemical environment in which they are placed (e.g., the pH of the environment).

In contrast, Applicants' claimed invention utilizes a dye which is a photochromic compound. As confirmed by the attached entry from the McGraw-Hill Dictionary of Scientific and Technical Terms, a photochromic compound is "[a] chemical compound that changes in color when exposed to visible or near-visible radiant energy." Accordingly, since the Senecal reference does not teach electrospinning a polymer solution containing a photochromic dye capable of reversibly changing color, it cannot be considered to anticipate the currently pending claims.

III. Claim Rejections under 35 U.S.C. §103

The rejection of claim 5 under 35 U.S.C. §103(a) as being unpatentable over the Senecal reference in view of Kasai et al. (JP 01111007; hereinafter "the Kasai reference") has been rendered moot by the cancellation of claim 5.

Applicants traverse the rejection of claim 11 under 35 U.S.C. §103(a) as unpatentable over the Senecal reference in further view of Balkus, Jr. et al. (U.S. Pat. Application Publication No. 2003/0168756; hereinafter "the Balkus reference"). Reconsideration and withdrawal of the rejection are respectfully requested in view of the claim amendments submitted herewith.

Independent claim 11 is directed to one aspect of Applicants' invention providing a process to make a dyed fiber which comprises mixing at least a photochromic dye capable of reversibly changing color and a polymethyl methacrylate polymer into a CHCl₃ solution to form a polymer dye solution and electrospinning said polymer dye solution to form a fiber wherein the dye penetrates more than the surface of the fiber. As mentioned previously in Section II of this Amendment, the Senecal reference does not teach or suggest the use of a reversible photochromic compound (i.e., a compound that is capable of reversibly changing in color when exposed to visible or near-visible radiant energy) as a dye in a polymer solution subjected to electrospinning to form a fiber. This deficiency is not remedied by the Balkus reference. Since all the components of Applicants' claimed invention are not taught or suggested in the references relied upon in the Office Action, a proper *prima facie* obviousness rejection therefore has not been established. Accordingly, the subject matter of claim 11 meets the nonobviousness criterion of 35 U.S.C. §103.

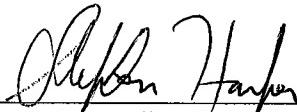
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IV. Conclusions

Applicants respectfully submit that the application is in condition for allowance and early and favorable action thereon is requested. If any issues should remain, the Examiner is invited to contact Applicants' legal representatives at the telephone number shown below.

Respectfully submitted,



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